



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,881	10/28/2003	Takashi Kubo	244640US0	4046

22850 7590 04/05/2005

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

RONESI, VICKEY M

ART UNIT PAPER NUMBER

1714

DATE MAILED: 04/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/693,881

Applicant(s)

KUBO ET AL.

Examiner

Vickey Ronesi

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1/21/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9 recites that the alcohol component comprises “a bisphenol A backbone.” This term causes confusion since it suggests a backbone derived from bisphenol A, however, applicant’s specification suggests only the use of bisphenol A adducts (page 7, line 14 to page 8, line 2). It is noted that bisphenol A adducts are no longer phenols and the use of the term “bisphenol A” *per se* is therefore misleading. In the interest of compact prosecution, the term “a bisphenol A backbone” has been interpreted to read on bisphenol A adducts in the rejections below.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 5, 6, and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohtani et al (US 4,789,613).

Art Unit: 1714

Ohtani et al discloses a toner composition comprising 0.3-50 wt % of a highly dielectric material (col. 4, lines 48-54) such as titanate salts (col. 4, lines 22-26); 0.5-2 wt % of a dispersion stabilizer such as calcium phosphate (col. 5, lines 32-34); and a polyester (col. 5, line 47).

In light of the above, it is clear that Ohtani et al anticipates the presently cited claims.

3. Claims 1-3, 5-8, 11, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by McClelland (US 3,965,071).

It is noted that the phrase “for a toner” is not a claim limitation. Case law holds that “where a patentee defines a structurally complete invention in the claim body and uses the preamble only to state a purpose or intended use for the invention, the preamble is not a claim limitation.” See *Rowe v. Dror*, 112 F.3d 473, 478, 42 USPQ2d 1550, 1553 (Fed. Cir. 1997).

McClelland discloses polyester catalysts comprising 0.0005-0.05 wt % (col. 2, lines 30-31) titanium compound (col. 1, line 57 to col. 2, line 33) and equal amounts of phosphoric acid (col. 2, lines 39-45), wherein the polyester is polycondensed in the presence of the catalyst (col. 1, lines 33-44). Although McClelland does not disclose the softening point of its polyester, it is the examiner’s position that such a property is inherently present since the polyester of McClelland is produced by the same methods and contains the same raw materials. Case law holds that a material and its properties are inseparable. *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

In light of the above, it is clear that McClelland anticipates the presently cited claims.

4. Claims 1-8, 11, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Duan (US 2002/0098972).

Art Unit: 1714

It is noted that the phrase “for a toner” is not a claim limitation. Case law holds that “where a patentee defines a structurally complete invention in the claim body and uses the preamble only to state a purpose or intended use for the invention, the preamble is not a claim limitation.” See *Rowe v. Dror*, 112 F.3d 473, 478, 42 USPQ2d 1550, 1553 (Fed. Cir. 1997).

Duan discloses a composition used for producing polyester comprising an 0.0001-10% organic titanium compound ([0017]) and inorganic phosphorus compounds ([0019]-[0021]), wherein the molar ratio of phosphorus to titanium, P/Ti, is in the range of about 0.001:1 to about 20:1 ([0022]). The composition is then contacted with raw materials for polyester ([0033]-[0038]). Although Duan does not disclose the softening point of its polyester, it is the examiner’s position that such a property is inherently present since the polyester of Duan is produced by the same methods and contains the same raw materials. Case law holds that a material and its properties are inseparable. *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

In light of the above, it is clear that Duan anticipates the presently cited claims.

5. Claims 1-3, 5-8, and 11-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Barkey (US 4,217,440).

Barkey disclosed branched polyesters used in electrographic toners (col. 10, line 3) prepared by polycondensing a diol such as $\text{RO}-\text{R}^1-\text{OR}^2$ (col. 8, lines 18-56) and diacids such as succinic acid (col. 8, line 57 to col. 9, line 31) in the presence of 0.01-0.1% titanium catalyst (col. 6, lines 51-68) and 0.1-0.5% deactivator such as phosphoric acid (col. 7, lines 15-40). Although Barkey does not disclose the softening point of its polyester, it is the examiner’s position that such a property is inherently present since the polyester of Barkey is produced by

Art Unit: 1714

the same methods and contains the same raw materials. Case law holds that a material and its properties are inseparable. *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

In light of the above, it is clear that Barkey anticipates the presently cited claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over any one of Ohtani et al (US 4,789,613), McClelland (US 3,965,071), Duan (US 2002/0098972), or Barkey (US 4,217,440), in view of Schiraldi (US 5,922,828).

The discussions with respect to Ohtani et al, McClelland, Duan, and Barkey in paragraphs 2, 3, 4, and 5 above, respectively, are incorporated here by reference.

Each one of Ohtani et al, McClelland, Duan, and Barkey are silent with respect to an amino-modified titanium compound.

Schiraldi discloses a polyester composition and the use of a titanium catalyst and teaches that variety of known titanium catalysts (including the ones taught by Ohtani et al, McClelland, Duan, and Barkey) also including amino-substituted titanium compounds (col. 5, lines 5-26).

In view of Schiraldi's recognition that a variety of known titanium compounds are equivalent and interchangeable as polyester catalysts, it would have been obvious to one of ordinary skill in the art to substitute any of the titanium compounds disclosed by Ohtani et al,

Art Unit: 1714

McClelland, Duan, or Barkey with an amino-functional titanium compound and thereby arrive at the present invention. Case law holds that the mere substitution of an equivalent (something equal in value or meaning, as taught by analogous prior art) is not an act of invention; where equivalency is known to the prior art, the substitution of one equivalent for another is not patentable. See *In re Ruff* 118 USPQ 343 (CCPA 1958).

7. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barkey (US 4,217,440) in view of Yamamoto et al (US 5,637,427).

The discussion with respect to Barkey in paragraph 5 above is incorporated here by reference.

Barkey discloses generically discloses the use of a bisphenol as a diol and the use of succinic acid as an exemplary diacid in making its polyester, however, it does not disclose the use of bisphenol A and an alkenyl-substituted succinic acid.

Yamamoto et al discloses toner and teaches that a polyester derived from ethoxylated bisphenol type diols (col. 8, lines 9-37) and alkenyl-substituted succinic acids (col. 8, line 61 to col. 9, line 4) provides for a toner with improved pulverizing properties, powder properties, preservability, fixing properties at low temperatures, impact resistance, and surface lubricating properties (col. 9, lines 5-21).

Since Yamamoto et al teaches the benefits by using particular raw materials in polycondensing a polyester and given that Barkey is already open to the use of a diol such as bisphenol A and a diacid such as succinic acid, it would have been obvious to one of ordinary skill in the art to utilize the raw materials taught by Yamamoto et al in Barkey and thereby arrive at the presently cited claims.

Art Unit: 1714

Correspondence

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vickey Ronesi whose telephone number is (571) 272-2701. The examiner can normally be reached on Monday - Friday, 8:30 a.m. - 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

3/31/2005

vr



Vasu Jagannathan
VASU JAGANNATHAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700